

Data Axle Monthly Newsletter

December 2024 and EOY Updates

data axle

Business Data Updates



Business Data Accomplishments

Enhanced Verification and Throughput with Improved Database Accuracy

Data Axle implemented new approaches to accelerate the processing of records in attempt to promote fulfillment status with a goal of achieving 4x throughput, enabling the ability to upgrade an **additional 250K records per month**.

- Prioritizing sources for immediate online research
- Multi-source matching and data appending
- Disconnect verification calls
- Targeted calling campaigns in tele-research

Additionally, business records with outdated attributes are routed through tele-research to either update or downgrade those that are more likely to be out of business. Data Axle has averaged downgrading approximately 145K a month since incorporating this process.

Model Rebuilds and Integration

Data Axle rebuilt and launched 5 new business models to increase coverage and accuracy.

- Location Employee Count
- Location Sales Volume
- Corporate Sales Revenue
- Corporate Employee Count
- Ownership

Business Data Accomplishments

Business Record and Attribute Increases

Data Axle added **860K new business records** to our Pre-Verified database via various sources. Through this source, Data Axle was able to verify and upgrade the new records to a verified status and add missing attributes. The verification and enhancement processes continue monthly.

Individual Business Records Accurately Linked to Firms

New process was implemented to identify and manage non-linked "orphaned" individual records.

- Identified 180K orphaned records not attached to a firm record
- Removed 40K unaffiliated individual records
- 25K firm records created for additional linkage
- 50K firm records scheduled for further review

Increased Accuracy of Corporate Linkage

Improved accuracy and coverage of corporate linkages by identifying inconsistent websites and identifying non-linked websites

- Keyword and phrase search functionality identifies records sharing common terms within website addresses (grouping)
- · Records manually reviewed, verified and/or updated with correct information

De-duplication Process

A new process was developed to identify duplicate business records. Fields are merged into one record when duplicate is identified. This process runs weekly.

Business Data Accomplishments

Verification Dates

- Business rules were modified to ensure verification date field was updated, including when a record was re-verified by tele-research
- 50K records verification dates were backfilled with correct dates

Location Linkage

- Increased coverage from 11MM records to 48MM (336% increase)
- Linked records across U.S., U.S Territories, and Canada and across all business fulfillment statuses

Unclassified SIC and NAICS Improvements

- Replacement of non-classified SIC and NAIC codes for verified US Business records using a website or social media URL when present
- 165K Verified businesses with previously unclassified SIC and NAIC codes received a new, accurate industry classification

Intent Data

8,000+ intent topics matched to 7MM+ business records

2025 Business Data Roadmap

Q1, Q2, and Beyond

Increase Count of Verified Businesses

Q1 Projects

- Accelerate velocity of new data source evaluation for in-demand categories for increasing record coverage and accuracy
- Implement automated calling to verify businesses as open, and prioritize for manual calling for attribute collection
- · Evaluate 4 new sources for both business and contact information

Q2 and Beyond

- Continuous exploration, evaluation, and testing of new business data sources
- Integrate a new business data source
- "Likely Open" business model re-evaluation

Increase Business Record Completeness

Q1 Projects

- Automate web research to collect firmographic data and other key attributes
- Add new businesses to pre-verified and fill in missing core attributes through sourced data integration to increase counts of complete verified records

Q2 and Beyond

- Implement legal linkage for franchise owners and other legal owning entities
- Implement intent data relevancy scores to filter weak data signals
- Launch expanded business financial dataset

Increase Counts & Coverage of Contacts and Emails

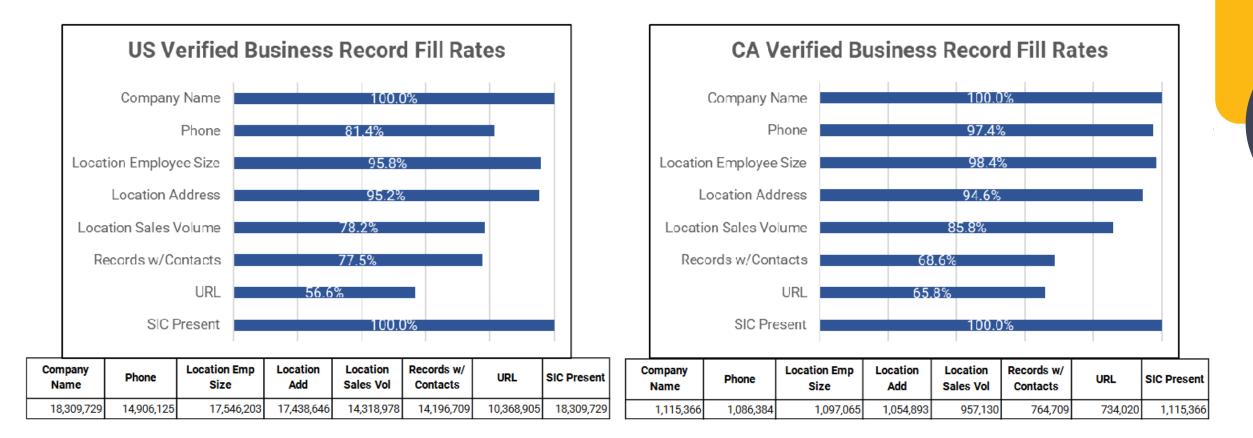
Q1 Projects

- · Create standardized job titles to enable easier search functionality
- Add additional new key contacts (Delayed from Q4 2024)
- Add new Contact data for updates and downgrades of contacts

Q2 and Beyond

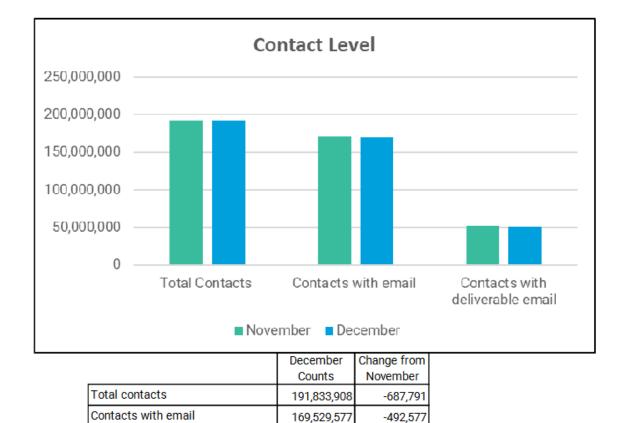
- Launch new standardized job titles
- · Integrate new contact data source to improve the coverage of business contacts
- Utilize social media resume source to update titles/downgrade contacts who changed positions
- Integrate new Contact data source
- Begin to deprecate title codes

Business Data – December Fill Rates



**Note that kiosks, ATMs, and other unmanned SIC codes will not have a contact, phone number, employee size, or sales volume assigned

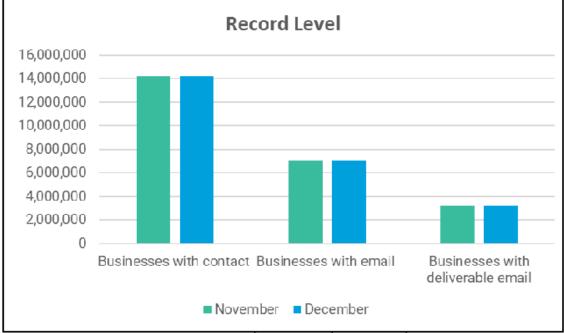
Business Data - Contact & Email Counts



51,639,083

-133,613

Contacts with deliverable email



| | December | Change from |
|-----------------------------------|------------|-------------|
| | Counts | November |
| Businesses with contact | 14,207,856 | 11,147 |
| Businesses with email | 7,014,958 | -13,657 |
| Businesses with deliverable email | 3,229,727 | -4,705 |

Business Compilation



Business News Impacting Business Data

Our ability to identify and make changes to a company's name, operational status, corporate linkage, information profile, and list of executives daily strengthens the trust we have with our clients. In 2024, our operations team has been able to review over 35,000 news articles this year and made over 31,000 various contributions to our database. Some of their findings were:



Mergers & Acquisitions

- Saks Global acquires Neiman Marcus Group for \$2.7B
- Honda and Nissan plan to merge into third largest automaker along with Mitsubishi
- Big Lots keeping 400 stores open after deal with Gordon Brothers



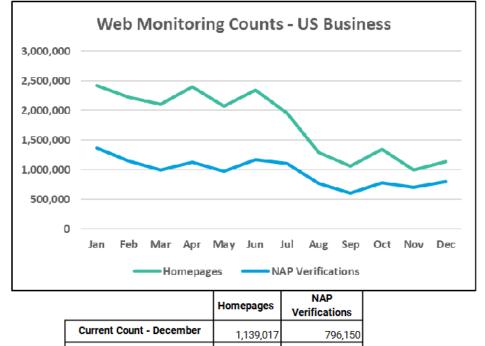
Closings

• Party City is closing all US Stores.

Web Monitoring Activity

The Data Quality team monitors approximately 2.3M business websites, online directories, and store locator pages each month. Web monitoring is an efficient secondary source for data validation, updates, and collection of enhanced content such as Hours of Operation, Social Media Links, Industry types, and more.

The Data Quality team enhances data using the store locator and home pages monthly:



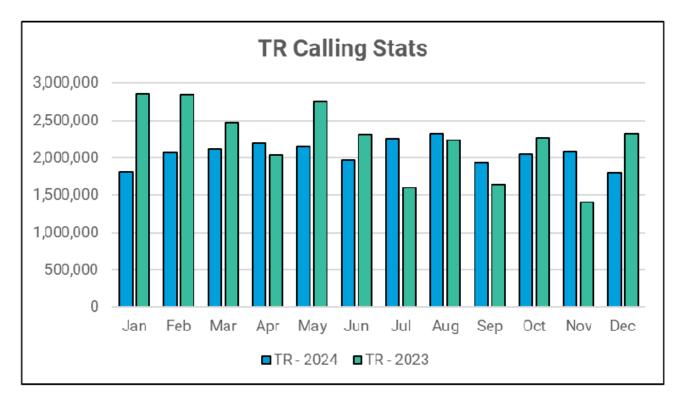
140,565

91,924

- Records updated could include updating the company name, moving the record into verified, etc.
- Enhanced Content = Delivery, reservations, Wi-Fi, Dress code
 - 76,150 websites modified or filled
 - 16,960 hours of operation modified or filled
 - 103,273 number of chains verified/updated
 - 790 new business adds to verified

Variance from - November

Teleresearch Updates



Data Axle's internal call center continues to be a main differentiator from our competition. Our call center continues to make approximately 26M phone calls per year. This element of human verification enables us to acquire self-reported business information daily.

Due to our expertise and flexibility, we can have dozens of different calling campaigns in production at the same time to collect different data points on segments of our data based on internal initiatives and customer needs. Outbound calls are dispositioned by our dialer and by agents.

| Year | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| 2024 | 1,810,372 | 2,070,813 | 2,114,492 | 2,199,234 | 2,149,970 | 1,970,574 | 2,259,333 | 2,325,470 | 1,940,182 | 2,055,939 | 2,086,169 | 1,793,902 | 24,776,450 |
| 2023 | 2,855,534 | 2,837,849 | 2,472,640 | 2,043,024 | 2,758,471 | 2,318,066 | 1,597,419 | 2,236,933 | 1,648,530 | 2,264,944 | 1,408,689 | 2,325,246 | 26,767,345 |

Attribute Changes – Verified Businesses

Every month, we see changes in our business database. These transactions are an aggregation of human verification, source application, model reassignments, content feedback enhancements, client updates, and postal processing.

| | US Business - Verified Only | | | | | | | | | | | | |
|-------------------------|-----------------------------|---------|-----------|-----------|-----------|---------|---------|-----------|-----------|---------|---------|---------|------------|
| Activity | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| Company Name changes | 95,561 | 81,643 | 97,793 | 117,904 | 79,248 | 200,522 | 119,416 | 106,029 | 206,741 | 108,123 | 74,621 | 68,123 | 1,355,724 |
| Address changes | 83,782 | 153,134 | 81,347 | 128,950 | 75,244 | 94,211 | 137,021 | 104,166 | 170,293 | 81,618 | 62,858 | 63,497 | 1,236,121 |
| Primary Contact changes | 70,702 | 64,846 | 97,026 | 91,045 | 191,317 | 192,535 | 214,856 | 831,618 | 87,774 | 236,858 | 128,666 | 70,405 | 2,277,648 |
| Phone changes | 57,650 | 53,696 | 60,080 | 86,181 | 59,694 | 63,456 | 90,756 | 132,543 | 204,289 | 59,121 | 56,369 | 71,011 | 994,846 |
| Employee Size changes | 13,978 | 14,778 | 13,182 | 11,162 | 11,449 | 8,582 | 9,668 | 43,343 | 60,115 | 12,079 | 9,017 | 7,695 | 215,048 |
| URL changes | 229,265 | 204,348 | 371,434 | 411,284 | 480,890 | 235,280 | 181,394 | 230,136 | 187,748 | 146,134 | 161,089 | 124,102 | 2,963,104 |
| Primary SIC changes | 82,063 | 75,500 | 246,545 | 112,968 | 67,797 | 70,406 | 122,081 | 162,655 | 166,220 | 100,721 | 97,696 | 66,922 | 1,371,574 |
| Secondary SIC changes | 27,935 | 30,905 | 34,169 | 31,489 | 28,188 | 38,701 | 27,376 | 226,937 | 39,134 | 28,755 | 21,332 | 24,053 | 558,974 |
| Linkage changes | 30,214 | 23,150 | 16,303 | 49,957 | 14,394 | 14,681 | 32,269 | 16,839 | 17,190 | 21,162 | 12,073 | 16,580 | 264,812 |
| Total | 691,150 | 702,000 | 1,017,879 | 1,040,940 | 1,008,221 | 918,374 | 934,837 | 1,854,266 | 1,139,504 | 794,571 | 623,721 | 512,388 | 11,237,851 |

| CA Business - Verified Only | | | | | | | | | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|---------|
| Activity | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| Company Name changes | 3,386 | 2,435 | 2,032 | 1,530 | 2,759 | 1,478 | 2,110 | 8,164 | 6,406 | 2,191 | 1,699 | 1,591 | 35,781 |
| Address changes | 3,324 | 2,018 | 2,524 | 2,315 | 3,178 | 1,379 | 2,068 | 3,606 | 2,216 | 201,730 | 1,971 | 3,626 | 229,955 |
| Primary Contact changes | 2,512 | 1,560 | 3,051 | 1,196 | 4,939 | 10,712 | 4,906 | 17,659 | 982 | 3,218 | 1,538 | 1,330 | 53,603 |
| Phone changes | 951 | 659 | 738 | 811 | 663 | 609 | 1,022 | 718 | 822 | 780 | 859 | 830 | 9,462 |
| Employee Size changes | 1,783 | 950 | 2,208 | 988 | 2,082 | 495 | 954 | 3,425 | 845 | 1,229 | 934 | 557 | 16,450 |
| URL changes | 16,247 | 12,329 | 11,634 | 9,393 | 9,764 | 10,536 | 9,498 | 6,677 | 7,100 | 7,385 | 8,940 | 8,372 | 117,875 |
| Primary SIC changes | 2,084 | 1,890 | 9,643 | 2,055 | 1,977 | 1,085 | 2,352 | 4,192 | 1,937 | 2,203 | 1,683 | 3,030 | 34,131 |
| Secondary SIC changes | 515 | 1,166 | 1,280 | 555 | 1,089 | 1,335 | 516 | 1,744 | 567 | 1,016 | 520 | 483 | 10,786 |
| Linkage changes | 1,516 | 934 | 468 | 463 | 2,282 | 513 | 649 | 497 | 491 | 1,068 | 455 | 1,076 | 10,412 |
| Total | 32,318 | 23,941 | 33,578 | 19,306 | 28,733 | 28,142 | 24,075 | 46,682 | 21,366 | 220,820 | 18,599 | 20,895 | 518,455 |

Consumer Data Updates



Consumer Data Accomplishments

Consumer Privacy Legislation – Data Removal

Removed data from consumer records in TX, FL, OR, MT NJ, NH, DE and NE to ensure compliance with newly passed privacy legislations. Data Axle continues to remove information from the following fields: Vendor Ethnicity, Vendor Ethnic Group, Vendor Religion, Vendor Language, Country of Origin, and Vendor Assimilation Code.

Increased Coverage of Individuals

Increased consumer household and individual records by leveraging wireless phone and Dates of Birth sourced data to reactivate previously inactive records.

- Increased coverage for new individual and household records (primary focus on 18- to 34-year-olds)
- Populate day/month/year for records with missing data
- Upgrade known month/year or year only data with day/month/year

Increased Coverage:

- Individual coverage expanded by 24.9% to 322M individuals.
- Household coverage grew by 26.9% to 194M households.

Enhanced Demographics:

- Individuals aged 18–34 increased by 34%, now totaling 77M.
- Date of Birth (day/month/year) data improved by 45.5%.

Consumer Data Accomplishments

Launched 4 Rebuilt Core Consumer Models

The new models were rebuilt using cutting-edge machine learning techniques and the latest data. We will see both increases to accuracy and closer alignment with the 2020 Census.

Models launched include:

- Owner/Renter
- Education
- Credit Card Revolver
- Marital Status

Updated Property Year Built with 2020 Census Data

Outdated data for neighborhoods developed after 2010 was replaced with the latest 2020 Census data, ensuring more accurate and up-todate information.

Updated U.S. Census Data

2020 Census demographic data (over 280 fields) was updated in internal platforms.

Consumer Data Accomplishments

Added Consumer Transactional Data

Consumer Transaction data was added in April 2024, consisting of individuals' and households' recent purchases across products, brands, entertainment, preferences, and services. Consumer transaction data is refreshed monthly, and segments have several identifiers including recency, transactional, behavioral and modeled.

Data Selections

- 28 Categories
- 259 Sub-Categories
- 3,189 Segments

Data Coverage

- 166MM Households
- 223MM Individuals

Added 12 New Political Partisan Modeled Segments

Built using a voter history data source and available in our consumer database. Models are different than our other Interest and Lifestyle political models as they focus on partisanship, not belief.

- Loyal Democrat
- Stable Democrat
- On-the-Fence Democrat
- Likely Democrat
- Potential Democrat
- Independent
- Loyal Republican

- Stable Republican
- On-the-Fence Republican
- Likely Republican
- Potential Republican
- Potential Independent

Consumer Data Roadmap

Q1, Q2, and Beyond

Increase Coverage of Individuals

Q1 Projects

- Evaluate 2 new email providers to increase deliverable coverage
- Evaluate 2 new data providers to increase coverage of individuals

Q2 and Beyond

- Integrate new sources from Q1
- Integrate additional key consumer email sources to increase coverage of individuals and deliverable emails

Data Compliance & Quality

Q1 Projects

- Receive detailed quarterly accuracy against cooperative benchmarks for consumer attributes
- Evaluate viability of consumer transactional propensity-based attributes

Q2 and Beyond

- Compliance with MN, TN, and VT privacy legislation
- Ability to downgrade consumers that have relocated with non-NCOA move sources

Increase Coverage & Accuracy of Modeled Attributes

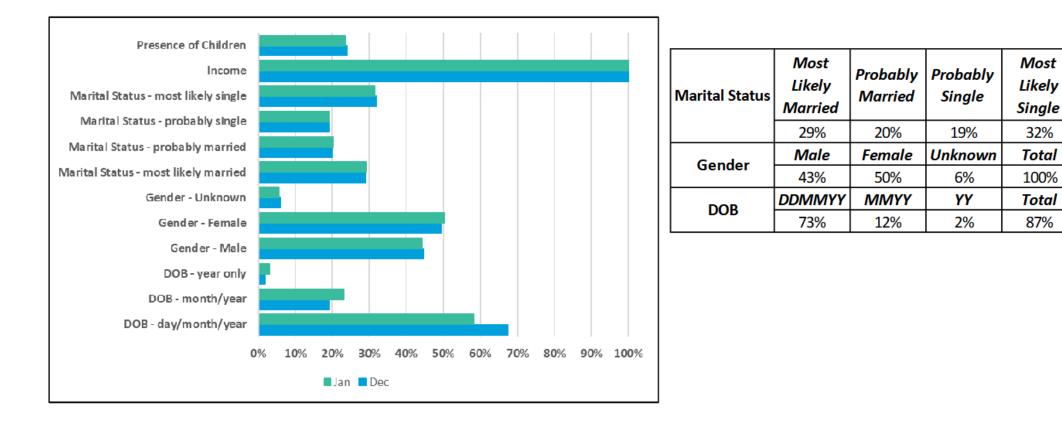
Q1 Projects

- Beta test consumer models: Income, Wealth, Purchasing Power Index (PPI) and Home Value (Delayed to March 2025)
- Beta test rebuilt Age of Head of Household and Socio-Economic Status Indicator (SESI) models

Q2 and Beyond

- Launch six rebuilt consumer models: Income, Wealth, Purchasing Power Index (PPI), Home Value, SESI, and Age of Head of Household
- Build, QA, and launch Individual level Education model
- Evaluate life event data source: Engaged, Newly Married, Expecting, New Baby

Consumer Data – Top Attribute Fill Rates



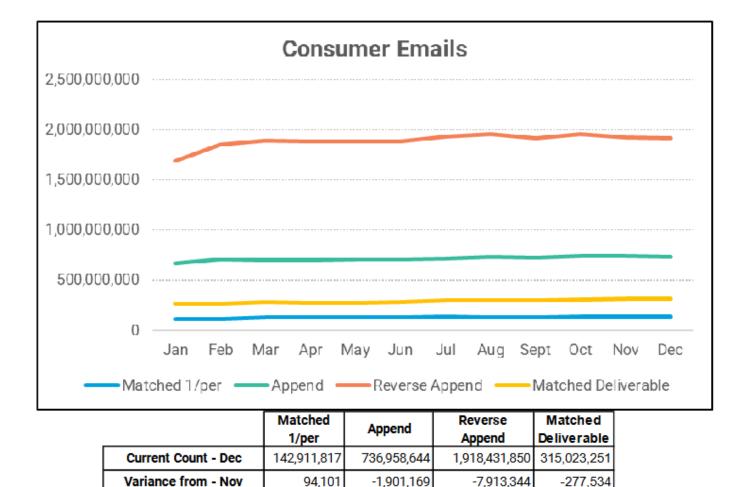
A new DOB source in February produced significant enhancements in DOB - month/year and DOB - year only attributes to DOB - day/month/year. DOB – "day/month/year" field shifted upwards 10% since January. In turn, "year only" decreased 1.2% and month/year decreased 4.5% respectively.

Total

100%

Marital Status percentages will shift in October due to updated model integration.

Consumer Data – Email Counts



Matched 1/per — Number of individuals in the consumer database with an email address (GST applied) — most actionable email returned

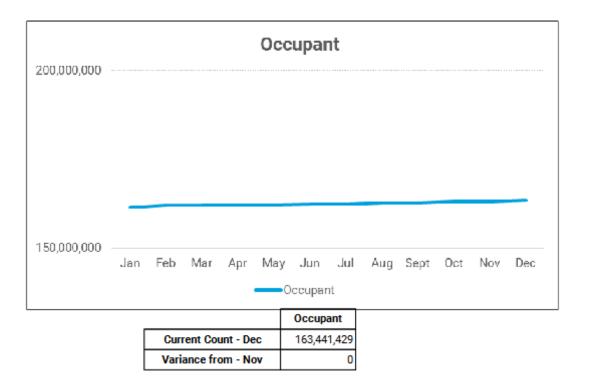
Append — A client name and address are matched to return a Data Axle email address — we host variations of contact name and address to help with matching

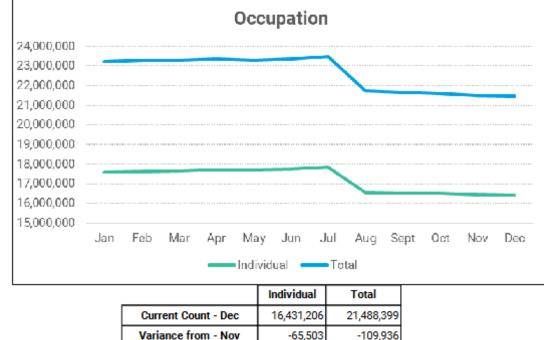
Reverse Append – A client email is matched to return a Data Axle name and address – our master file includes all emails regardless of status

Matched Deliverable – Emails matched to an individual and determined to be deliverable after hygiene validations

Additional Data Assets & Platforms

Occupant & Occupation Counts





The Occupant database contains every deliverable address but does not contain consumer names.

- Can be used for mass mailing, neighborhood mailing, saturation mailing, & bulk mailing that qualifies for postal discounts.
- Database is rebuilt every two months.

The Occupation database is a collection of occupational licenses and the individuals who have earned them.

- Data comes from public sources representing a mix of business and residential addresses.
- An individual can have more than one professional license and can hold licenses in multiple states.

Data Axle Platform Data Accomplishments

Enhanced Record List Feature

Allows users to upload lists of IGIDs to track specific records, visualize targeted lists directly within the Platform UI, and isolate and monitor changes to targeted record lists.

Canadian Address Standardization

To improve quality, Data Axle introduced a new process for validating Canadian business addresses using address hygiene software. Integrating this process in the Platform ensures Canadian business addresses are aligned with Canada's postal standards.

New Attribute for Business Fulfillment Status

New "In_Business_Previous_Status" attribute allows users to identify the prior business status whenever a change occurs, providing a clear view of status transitions.

Introduced New Attributes

New attributes, TikTok URL and In Business Previous Status, were added to the Platform.

Data Deliveries

Data Deliveries now include fill rate file for all deliveries and an optional IGID file.

Thank You!

First Name Last Name

Title, Government Office: (XXX) XXX-XXXX <u>FirstName.LastName@Data-Axle.com</u>

First Name Last Name

Title, Government Office: (XXX) XXX-XXXX FirstName.LastName@Data-Axle.com